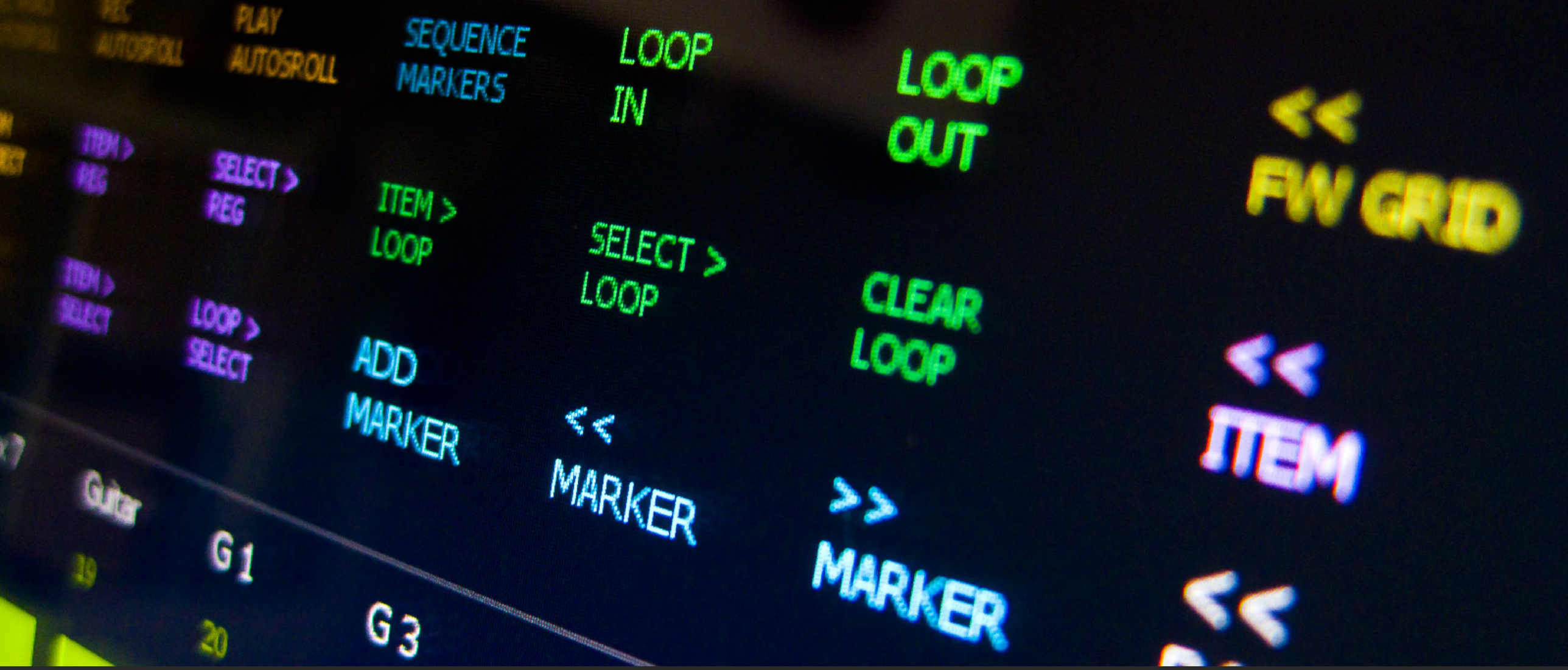
Advanced Touch Controller

Binder
For Reaper

User's Manual
1.0

Binder is a controller for Cockos Reaper

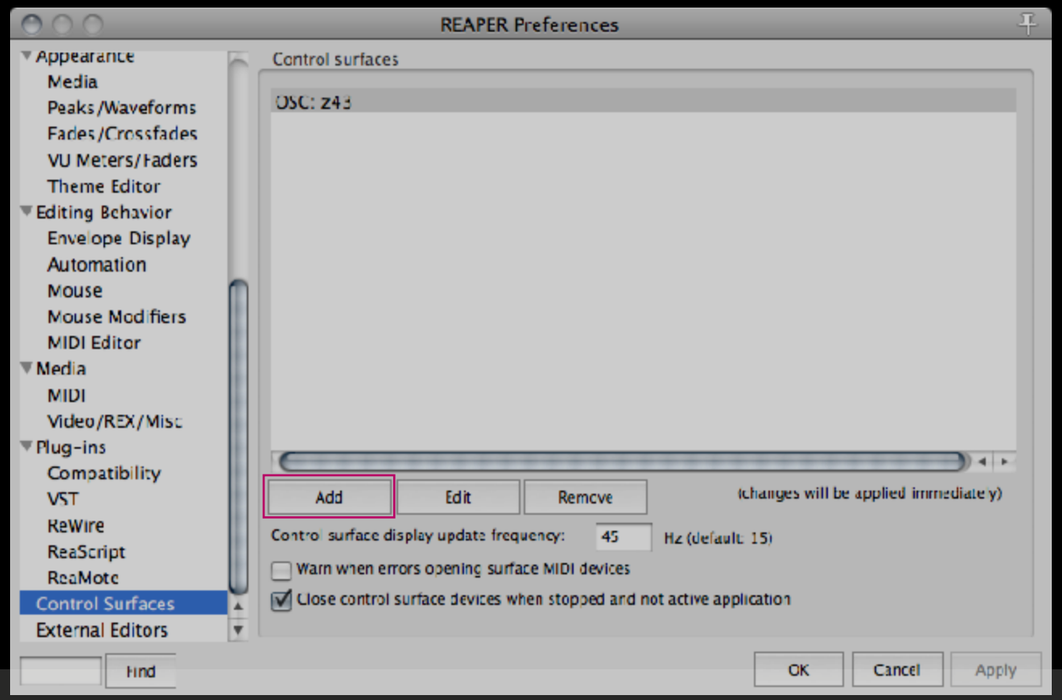
- Tracks with names in scrollable banks of 30 tracks, with dedicated sends matrix
- Direct controls for level, pan, cut/solo/arm, up to 4 sends, track monitoring and track automation modes on each track
- Multiple tracks selection (enables grouping of mixer parameters like level, pan, cut/solo/arm, etc.)
- K-system color-coded metering on each track
- Almost full control of selected track FXs: all parameters wih real names and values in a banks of 16 knobs, bypass, bypass all FXs on track
- Dedicated full FX bypass (including master) button
- Dedicated buttons for item/track/take manipulations
- Advanced item/marker/grid navigation and full DAW snapshots

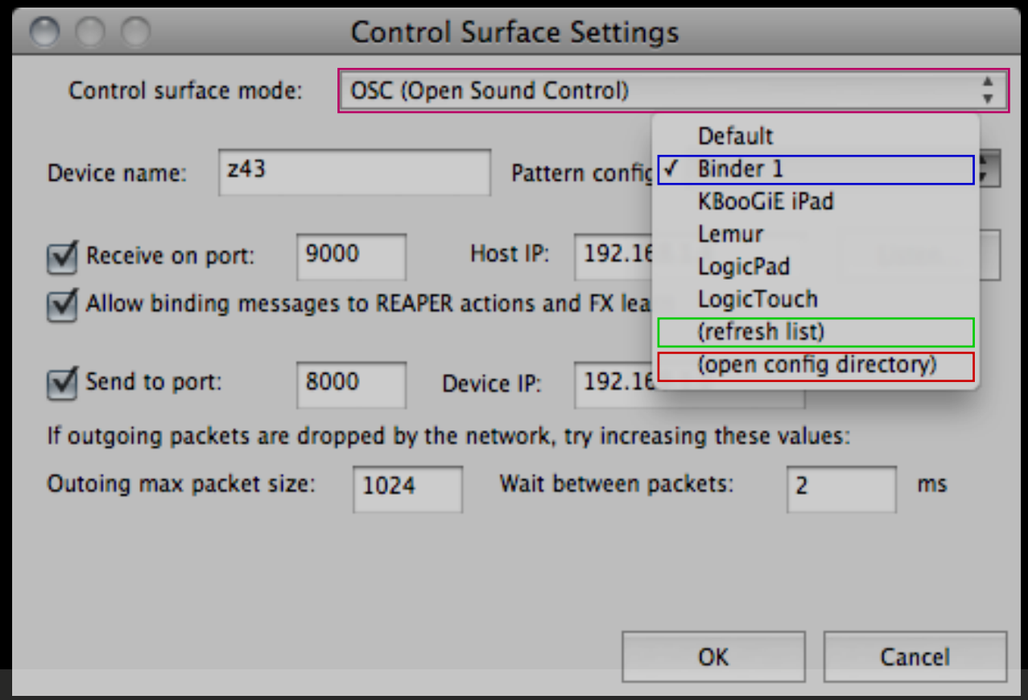


Installation and connection

Upload “Binder 1.jzml” to your Lemur on iPad.
Make sure that your iPad and host DAW are on the same high-speed wireless network. It is preferable to use ad-hoc Wi-Fi connection.

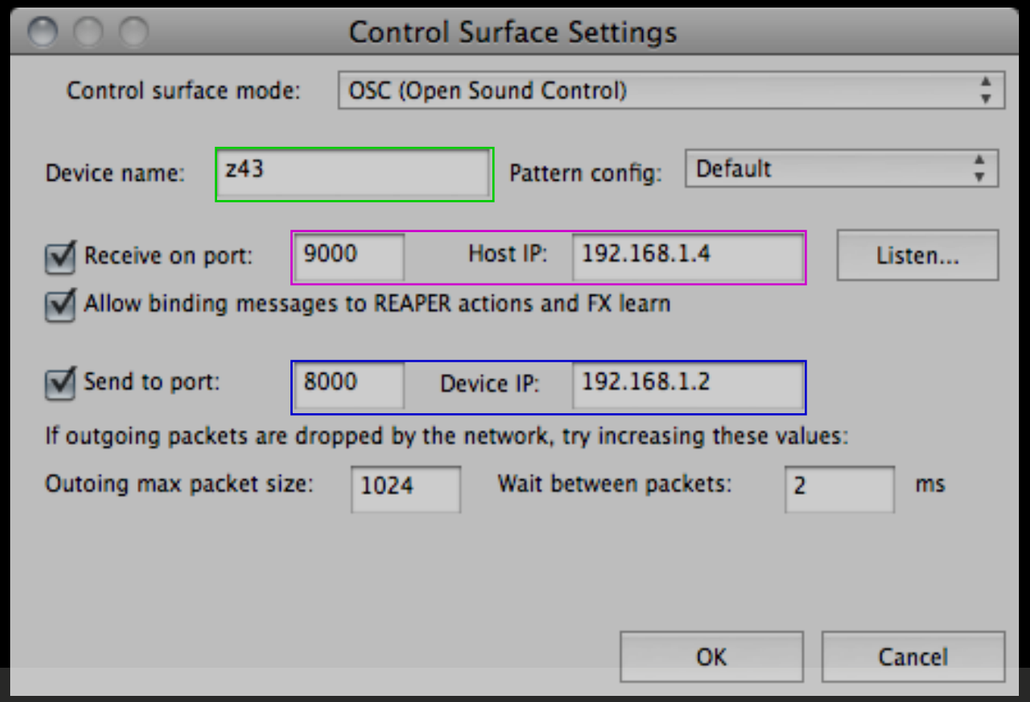
Also you need to install SWS Extensions pack for Reaper to get access to many features including markers and snapshots handling, track FX operations and other.

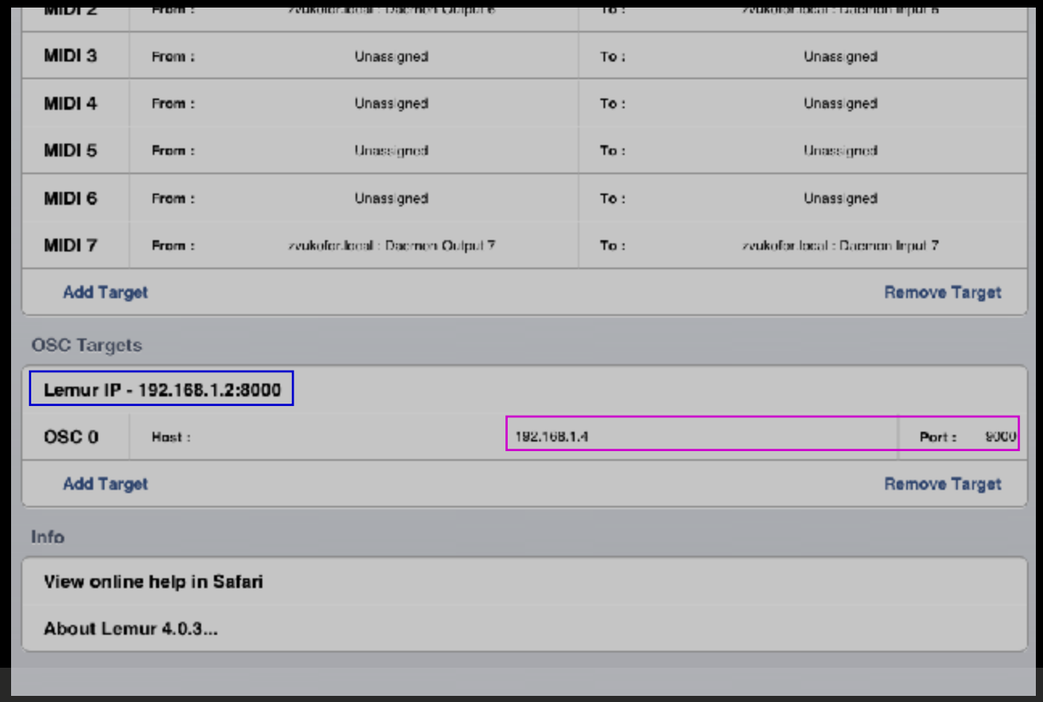




Add new control surface in Reaper's preferences.
Name it as you wish.
Set control surface mode to OSC.

In "Pattern config" choose "open config directory".
Copy files "Binder 1.ReaperOSC" and "reaper-osc-actions.ini" there.
Click "refresh list".
Select "Binder 1" as preferable configuration file.





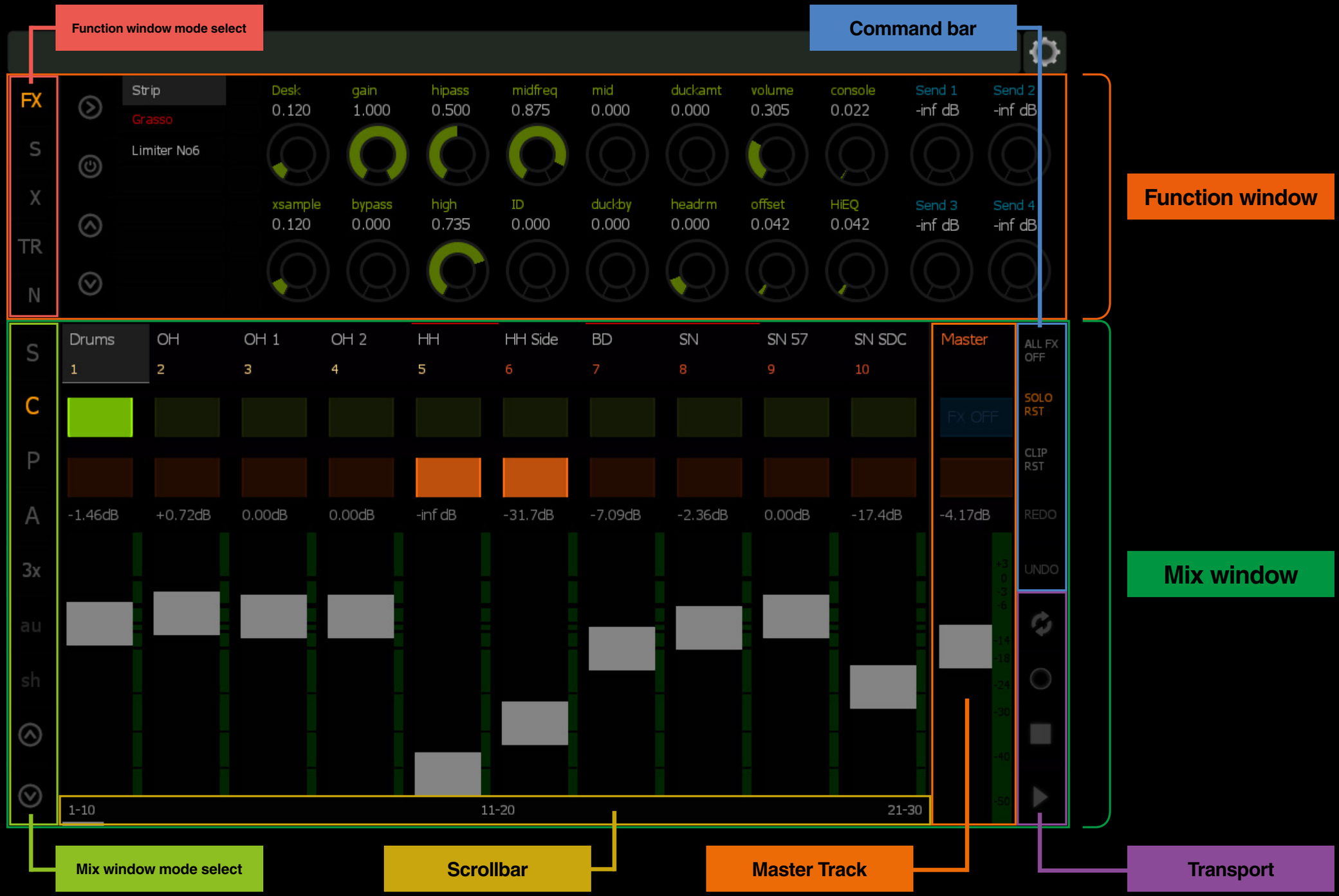
Set “device name” to your’s iPad name.
Check all checkboxes as shown.
Set “Receive on port” to any port number (except 8000).
Set “Send on port” to 8000 — Lemur’s port.
Set “Device IP“ to your iPad’s IP address — you can get it in Lemur.

Go to Lemur’s “More Settings”, scroll down to “OSC Targets”.
Here you can see your iPad’s IP and receiving port (to write them in Reaper’s preferences).
Set Host IP to same one you can see in Reaper’s preferences.
Set Host Port to same one you assigned in Reaper’s preferences.

Overview

Now when connection is established you should see how bidirectional connection works. Just open any Reaper project and you'll see all track names and fader positions appears in Binder.
Let's take a look closer on how Binder functioning.

There are basically two sections in Binder — "Function window" on top and "Mix window" on bottom of the screen.
As there are many modes in both windows, there are "Window mode select" buttons on the left side of each one. All modes are explained in next chapters of manual.

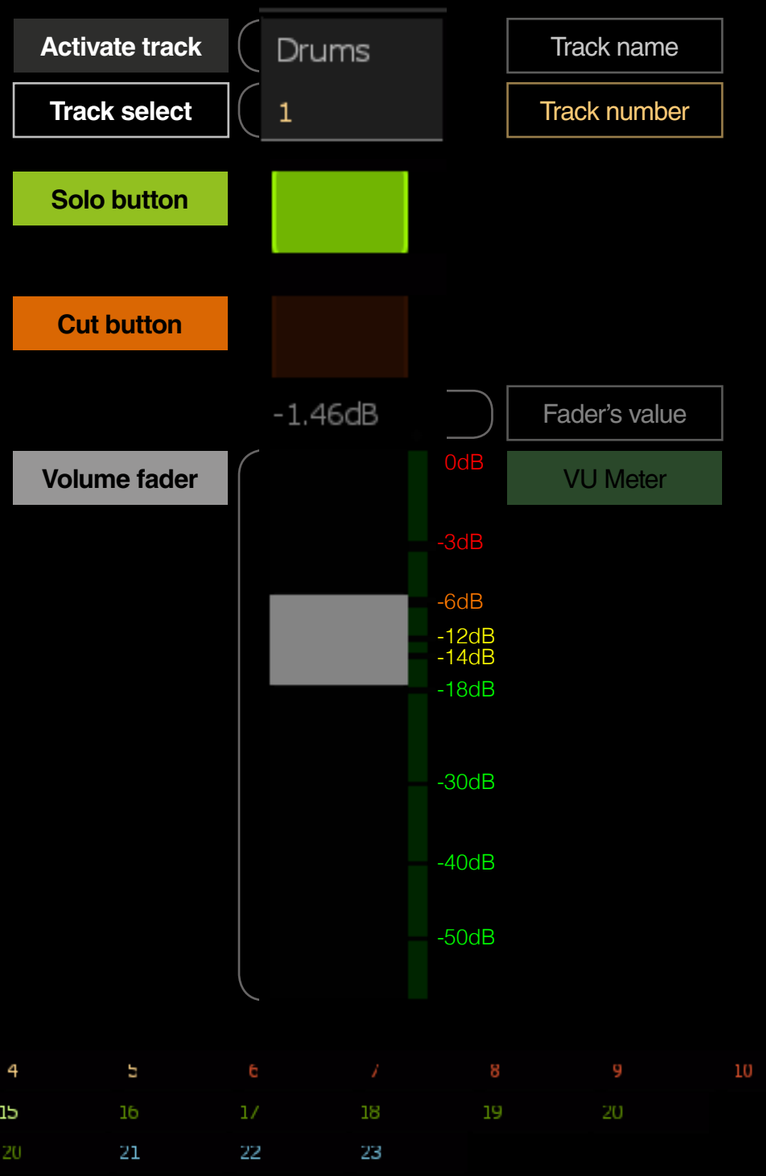

Function window mode select
Command bar
FX
S
X
TR
N
Strip
Grasso
Limiter No6
Desk 0.120
gain 1.000
hipass 0.500
midfreq 0.875
mid 0.000
duckamt 0.000
volume 0.305
console 0.022
Send 1 -inf dB
Send 2 -inf dB
xsample 0.120
bypass 0.000
high 0.735
ID 0.000
duckby 0.000
headrm 0.000
offset 0.042
HiEQ 0.042
Send 3 -inf dB
Send 4 -inf dB
Function window
S
C
P
A
3x
au
sh
Drums 1
OH 2
OH 1 3
OH 2 4
HH 5
HH Side 6
BD 7
SN 8
SN 57 9
SN SDC 10
Master
-1.46dB
+0.72dB
0.00dB
0.00dB
-inf dB
-31.7dB
-7.09dB
-2.36dB
0.00dB
-17.4dB
-4.17dB
FX OFF
ALL FX OFF
SOLO RST
CLIP RST
REDO
UNDO
1-10
11-20
21-30
Mix window
Mix window mode select
Scrollbar
Master Track
Transport

Mix window

Here we'll take a look at all modes of Mix window, which accessible via left-sided buttons. Just try it yourself and it all will be self-explaining even without manual.

Note that changing modes changes only part of Mix window — track headers including names and track number are always visible, just as Master track.

Channel strip



• Tap upper area with name to activate track — active track's (hIghlighted background) FXs parameters and Sends are appears in Function window.

• Tap bottom area with number to select track — selected tracks (white underlined) are appears selected in DAW, so linking of track's parameters is possible, i.e. you can select many tracks to Arm, Solo or to ride a volume faders simultaneously, just like you do in Reaper.

• There are option in Function window' Extras to link track's activation and selection, i.e. active track becomes selected.

• Doubleclick fader to reset it to "0 dB" position.

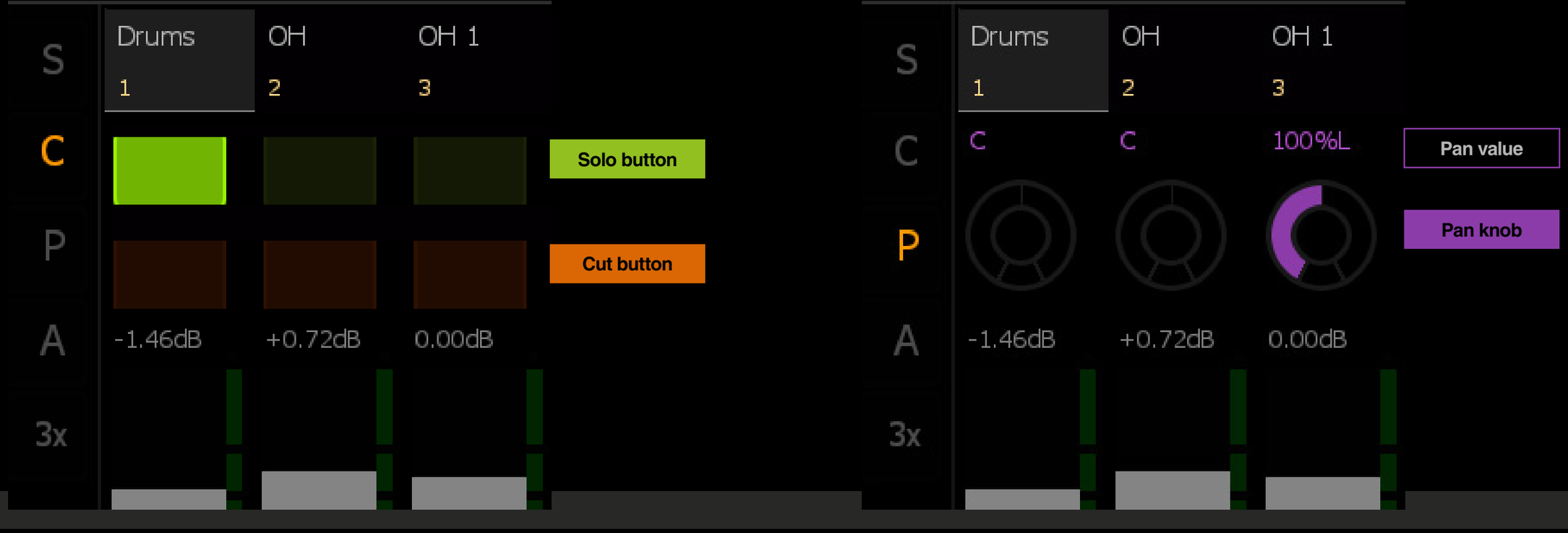
• Fader's "physics" — it's movement speed (or "mass") can be adjusted or overrided in Function window' Extras.

• Fader's behavior — "Touch cap only" or "Touch anywhere on fader", "Capture fader" can be adjusted or overrided in Function window' Extras.

• VU Meter's marks are set approximately and depends on selected pan laws and channels' content, being most accurate in mono mode.

• VU meters are color coded according to K-14 system: green up to -14dBFS, yellow up to -6dBFS, orange up to -3dBFS, then red up to 0dBFS and clipping 0dBFS+ indicator.

• Track numbers are mnemonically color-coded to Red, Green and Blue by ten tracks, and by light-dark halves in tens. This coding further simplifies navigation.

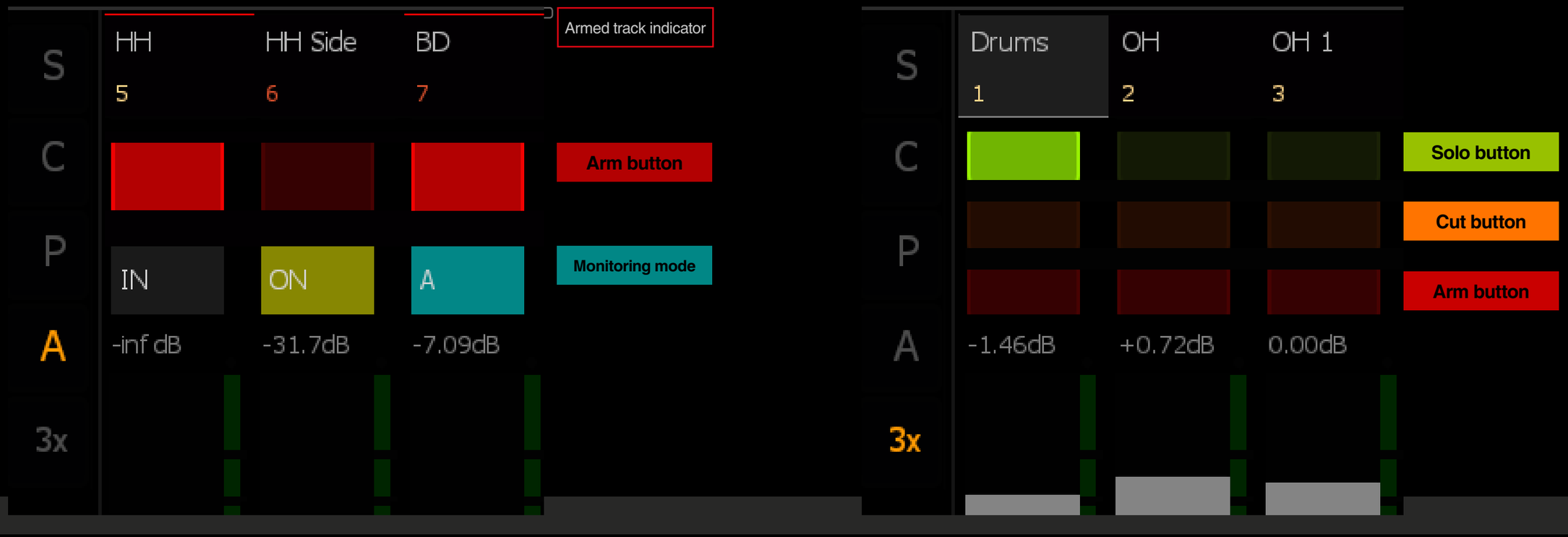


C is for “Cuts ans solos”

- This is default mode for mixer, it is always starts showing this tab.

P is for “Pans”

- Doubleclick on pan knob to reset it to center.



A is for “Arms and input monitoring”

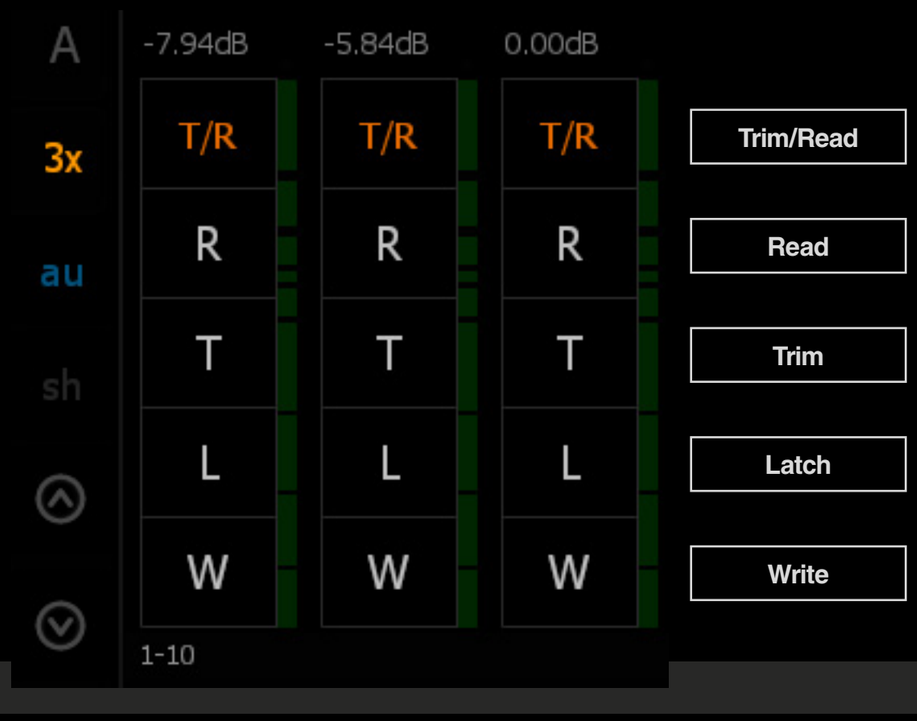
• Armed tracks indicated by thin red line above track name, so you can see them even if mixer is in another mode.

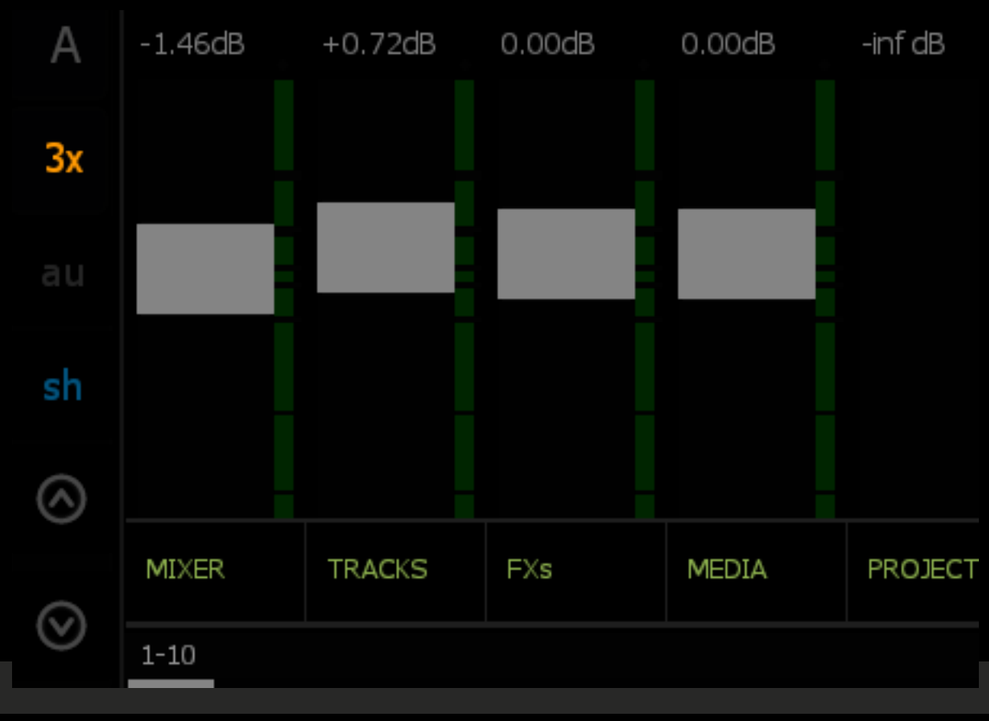
• Input monitoring cycles through “input”, “on”, “auto”. Please refer to Reaper user’s manual for explanations of record monitoring modes.

3x means all three buttons — Solo, Cut and Arm are shown

• Solo, Cut and Arm are shown together, albeit each one smaller in size.

• Triple button mode is useful when recording takes on separate tracks, recording double-tracks and so on.





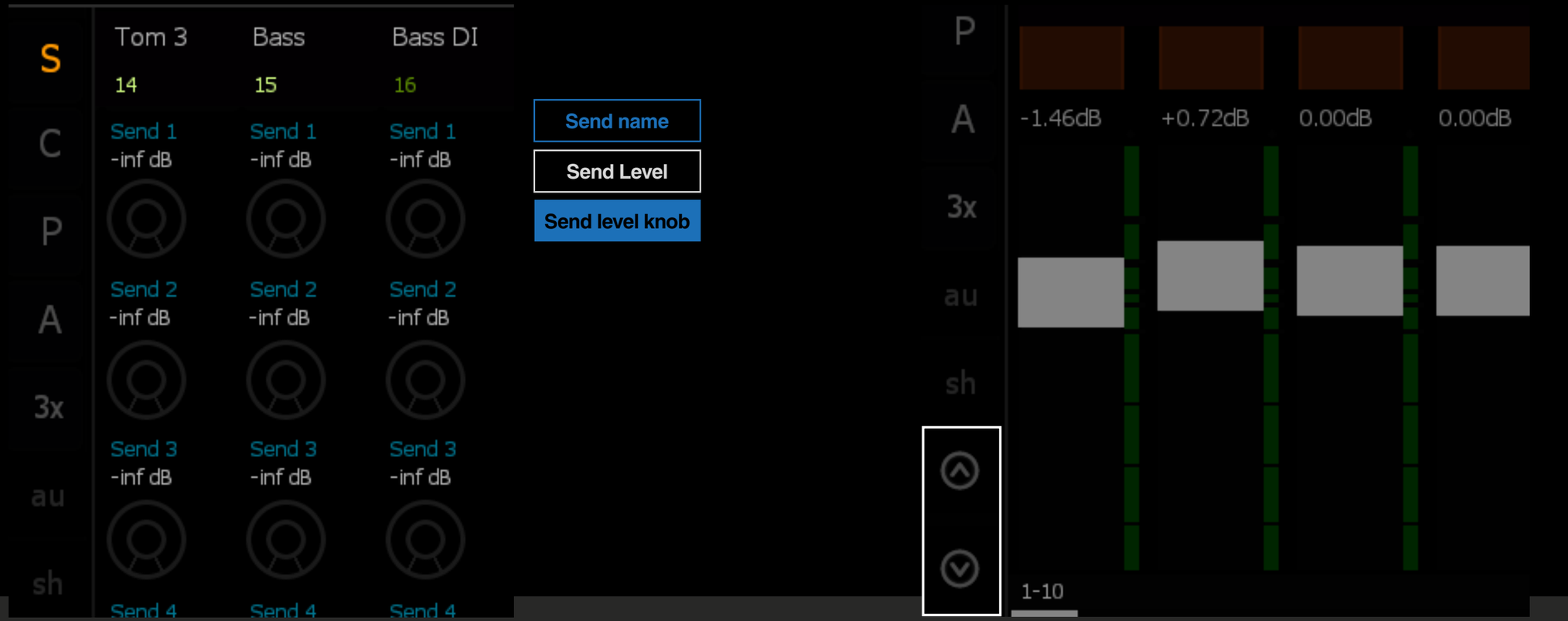
Au is for “Automation”

- Switching track automation modes.

- There are some issues regarding Touch/Latch modes in Reaper, you can learn about them more at Cockos Reaper’s forums.

Sh is for “Show windows”

- Buttons recalls different Reaper’s windows, such as CPU meter, FX browser, etc.



S is for “Sends”

• Shows first 4 sends for tracks.

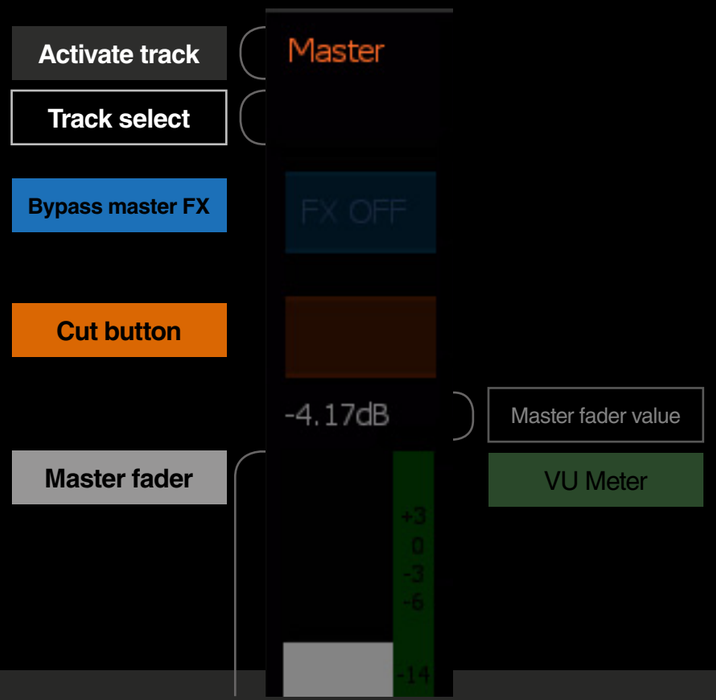
• Doubleclick on send knobs resetting them to zero (-infinity level).

• When Sends activated in Function window, while Sends showing here, Mix window switches to “Cut and Solos” mode automatically.

Up and Down tracks Banks

• You can see 30 tracks simultaneously via scrolling through mix window, and when you have more than 30 tracks in a project they devided in to Banks of 30 tracks.

• This is a same Banks you can see in other control surfaces, only being 30 track “wide“ for more flexibility.



Frequently used functions bar

ALL FX OFF
• Bypasses all FX in project.

SOLO RST
• Resets all soloes. Lights up when one or more tracks are soloed.

CLIP RST
• Resets all VU meters and clip indicators in Binder and in Reaper.

REDO
• Redo. Works on fader/knob moves too, refer to Reaper's manual for options and customisation.

UNDO
• Undo. Works on fader/knob moves too, refer to Reaper's manual for options and customisation.

Master channel

• Master channel is always visible despite different modes in Mix window

• Cut button just mutes all Reaper's master outputs.

• Master fader can function as a monitor's controller, it is also resettable to "0dB" with doubleclick.

Main transport

• Activate loop playback/recording.

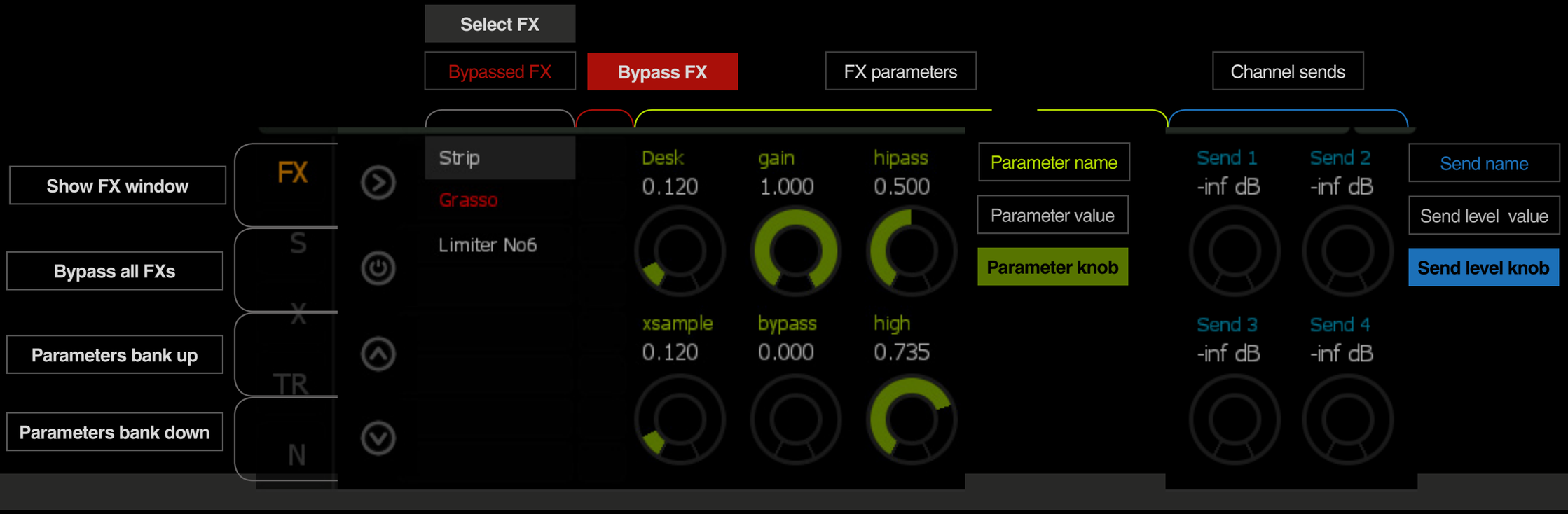
• Record.

• Stop.

• Play/Pause.

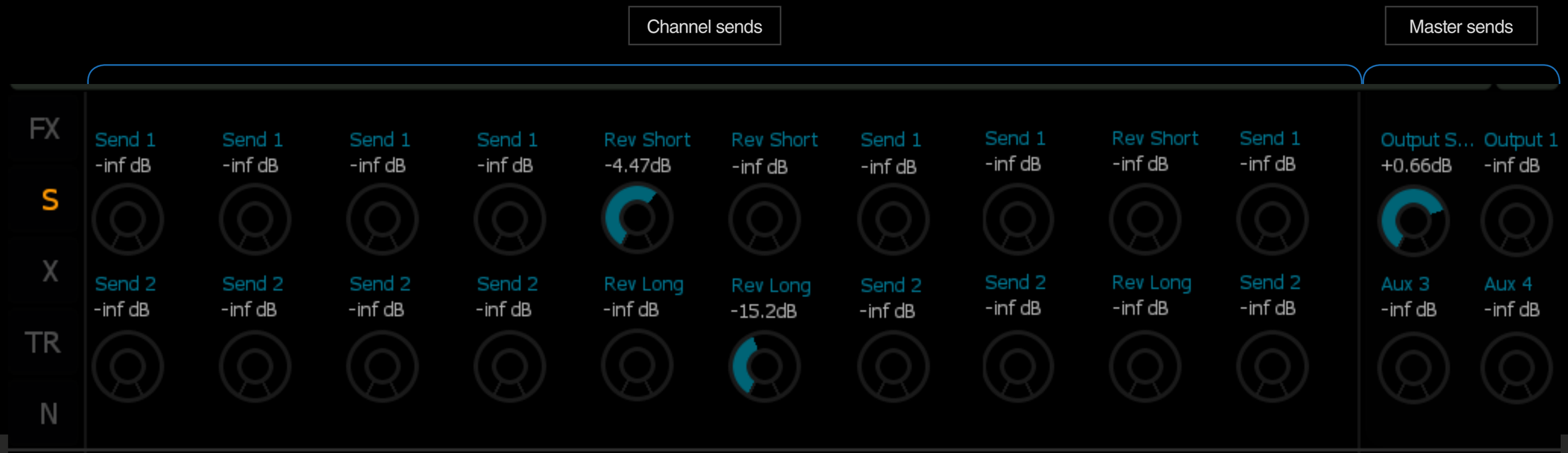
Function window

Here we'll take a look at all modes of Function window, which accessible via left-sided buttons.



FX is for “FX parameters”

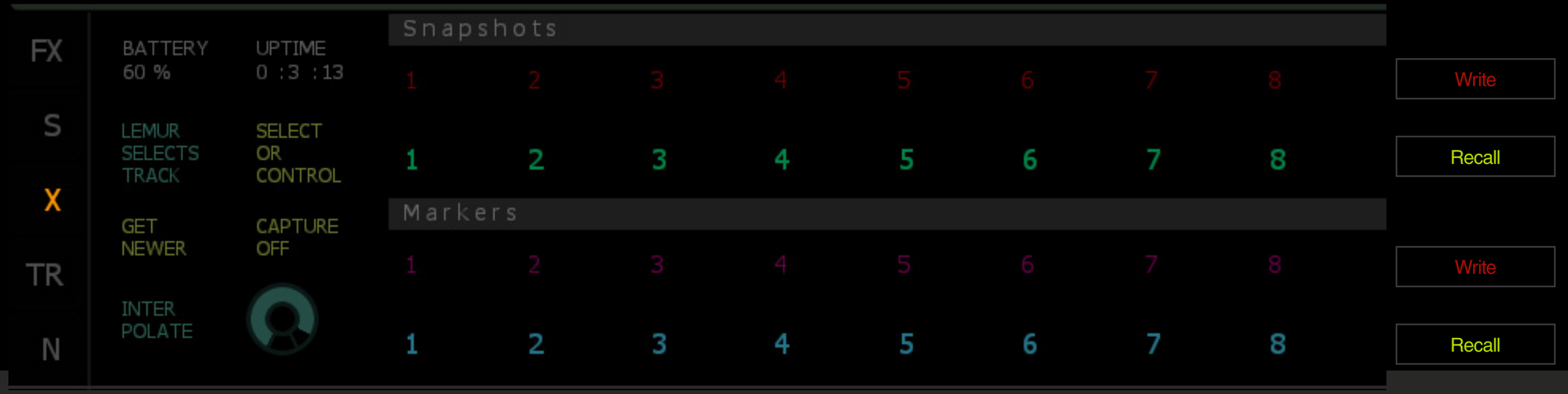
- FXs chain and FX parameters and 4 sends for active track
- This is default mode for Utility window.
- “Show FX window” recalls plugin’ window in Reaper.
- Note that “Bypass all FXs” works for Selected, not Active track.
- If there’s more than 16 parameters in a plugin, use “bank up” and “bank down” to switch between banks of 16 parameters.
- Parameter’s values displays correctly only when implemented correctly in plugin itself.
- Sends levels resettable to “- infinity” by doubleclick.



S is for “Sends”

- Same Sends you can recall in Mix window, just only first two of them.

- 4 sends for master channel accesible from here, and they stays in plase while scrolling across channels.



X is for “Extras”

• Binder preferences, battery percentage and device uptime.

• Reaper snapshots and markers save and recall.

• Binder selection behavior:

“Reaper selects track” — selected track in Reaper changes only when the user changes it in the Reaper window.

“Lemur selects track” — selected track in Reaper follows the track currently selected in Binder.

“Select OR control” — selected track in the Binder changes only when you changes it in Binder.

“Select AND control” — selected track in the Binder follows the last touched track in the Reaper window.

• Fader behavior:

“Get newer” — move fader by touching any place on fader (new touches gains control)

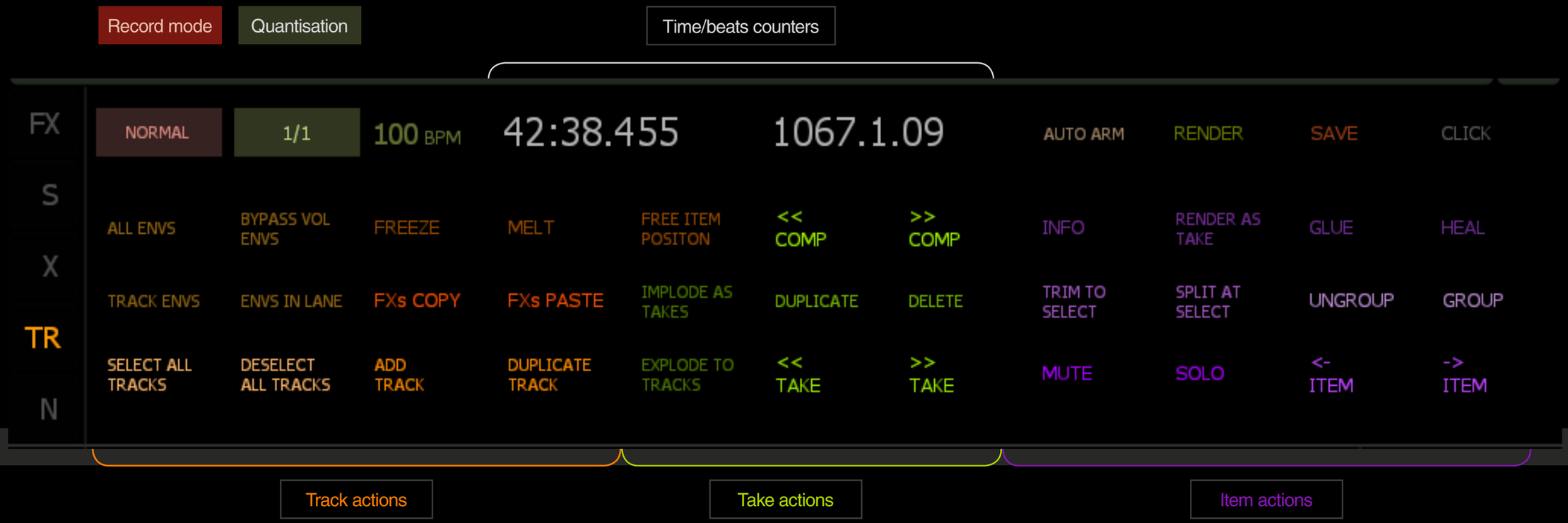
“Cap only” — move fader only by touching it’s cap.

“Capture off” — move fader only by touch within it’s visible area.

“Capture on” — even if the your finger leaves the fader for another position, it will still remain in control of this fader (so you can control first and last channel faders simultaneously).

“No physics” — fader tracking touches immediately.

“Interpolate” — physics simulation model, with a knob adjusting speed of interpolation. Can be used to smooth moves while riding faders, create slow fades manually, or just to simulate a fader “mass”.

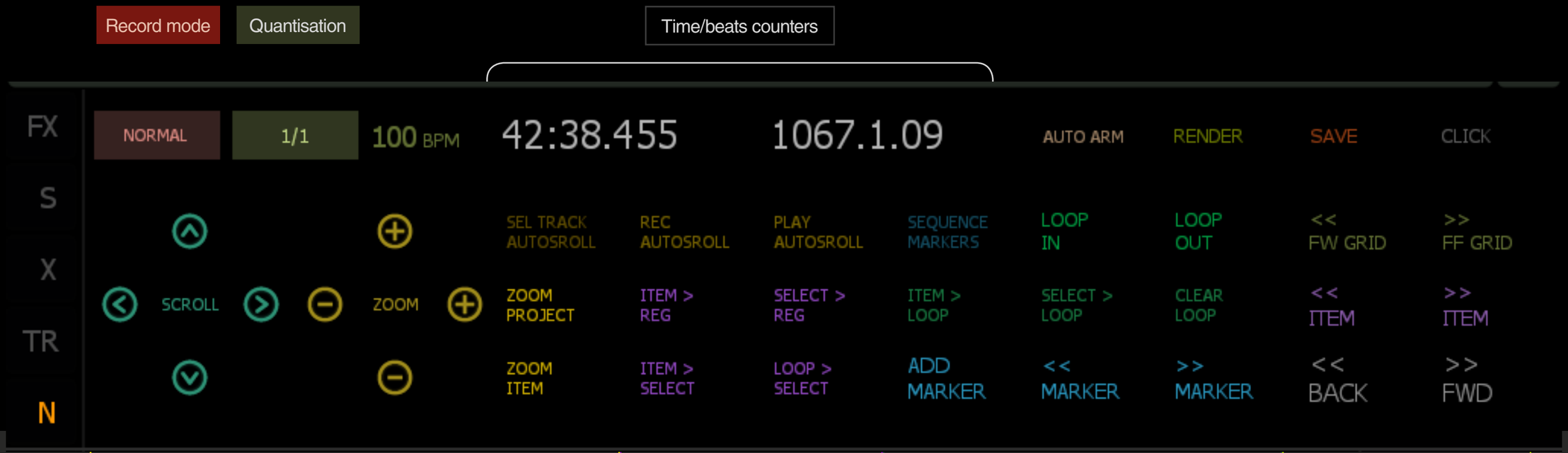


TR is for “Track”

- Track’s frequently used actions, comp and item actions.

- Time/beats counter, rec mode/quantisation and rendering/saving actions appears both here and in “N” mode.

- Almost all buttons are self-explanatory, but we assume you should try them on a demo project in Reaper.



N is for “Navigation”

- FF/FW, move cursor by items, markers, etc.
- Loop, regions and markers actions.
- Scrolling and zooming across timeline.
- Time/beats counter, rec mode/quantisation and rendering/saving actions appears both here and in “N” mode.

B is for “Binder”

Lemur is a trademark of Liine.
Reaper is a trademark of Cockos Inc.

Binder is designed by Zvukofor Sound Service, Saint-Petersburg, Russia.
This manual designed by Syrup AG.

T is for “Thanks”

We’d like to thank all independent Lemur layout designers for their contribution to this work, as there was many things to learn from their works.

Also we’d like to thank Liine team for making such a great tool as Lemur.

Many thanks to Syrup Art Group for beta-testing and graphic support.

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Binder for Reaper

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